

REMARKS

Claims 1, 3-6, 10, 12, 14, 15, 25, 28, 29, 33, 36, 38, 40, 42, 47, 50, 68, 76, 78, 81, 82 and 83 are now pending in the application. Claims 1, 29 and 38 have been amended. Claim 83 has been canceled. Support for the foregoing amendments can be found throughout the specification, drawings, and claims as originally filed. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 3-6, 12, 15, 25, 28, 29, 38, 40, 42 and 83 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sachs (U.S. Pat. No. 4,309,452). This rejection is respectfully traversed.

Applicant has amended claim 1 for clarification. Claim 1 recites “depositing with an inject device a plurality of spaced apart droplets of radiation curable ink onto the substrate in a first pass[.]” Applicant submits that Sachs fails to teach the above features.

Sachs at best appears to show certain features with respect to gloss coating and does not use an ink jet device. For example, Sachs at column 4, lines 44-47 states “[a] conventional printed and valley embossed vinyl tile was direct roll coated with a layer approximately 0.025 millimeter (mm) thick of a UV curable low gloss urethane wear layer coating (PPG R64N74).” In other words, Sachs teaches using a roller to apply coating to a substrate, rather than using an inkjet device. Applicant further notes that a roller is not able to apply “spaced apart droplets” on a substrate. Thus, Sachs cannot

teach depositing with an inject device a plurality of spaced apart droplets as required in claim 1.

In view of the foregoing, Applicant submits that claim 1 and its dependent claims define over the art cited by the Examiner.

Applicant has amended claim 38 to more clearly point out the claimed subject matter. Claim 38 recites “a printhead arranged to deposit a second pass of ink on a second sub-area adjacent to the first sub-area, wherein only a minor part of the second pass of ink is deposited on top of partially cured ink deposited on the substrate including the first pass of ink.” For example, as shown in Figures 1 and 3, embodiments of claim 38 can use multiple passes over an area of the substrate in order to cover it with ink, where a successive pass of ink partially covers the partially cured preceding pass of ink. Thus, the successive pass of ink is deposited smoothly onto the partially cured preceding pass of ink. See also page 12, line 28 to page 13, line 6 of the specification originally filed.

Applicant submits Sachs fails to teach the above features. Sachs explicitly states [A]pplying to selected areas of the surface of the thus partially cured first layer a second layer of the same or a different radiation curable material and subjecting the second layer as well as at least the surface of the first layer to ionizing irradiation or ultraviolet light in an inert atmosphere containing less than about 1,000 ppm oxygen to thereby complete the cure of the first layer and completely cure the second layer. (Column 1, lines 54-61.)

Following the application and partial curing of the first layer of radiation curable coating material in an oxygen containing atmosphere, a second layer of the same or a different coating is applied to the least partially uncured first layer in selected areas only and the entire coating, i.e. both layers, is then subjected to complete curing in an inert atmosphere containing less than about 1,000 ppmm oxygen and frequently less than about 250 ppm oxygen. (Column 3, lines 38-46.)

In other words, Sachs at best appears to show applying a second layer of coating entirely on top of a first layer of coating. In other words, the second layer completely overlaps the first layer. Thus, Sachs does not teach the features that “wherein only a minor part of the second pass of ink is deposited on top of partially cured ink deposited on the substrate including the first pass of ink” as recited in claim 1.

In view of the foregoing, Applicant submits that claim 38 and its dependent claims define over the art cited by the Examiner for one or more of the reasons set forth above regarding claim 1.

Claim 29 recites features similar to the above distinguishing features of claim 38. Thus, Applicant submits that claim 29 defines over the art cited by the Examiner.

Claims 38, 47, 68 and 76 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Cleary et al. (U.S. Pat. No. 6,457,823). This rejection is respectfully traversed.

Claim 38 recites “a printhead arranged to deposit a second pass of ink on a second sub-area adjacent to the first sub-area, wherein only a minor part of the second pass of ink is deposited on top of partially cured ink deposited on the substrate including the first pass of ink.” Applicant submits that Cleary fails to teach the above features.

For example, Figure 6 and column 5, lines 16-34 of Cleary at best show that multiple paths are deposited side-by-side on the substrate. Cleary, however, does not disclose that a minor part of the successive path is deposited on top of the preceding path.

In view of the foregoing, Applicant submits that claim 38 and its dependent claims 40, 42, 47, 50, 68, 76, and 78 define over the art cited at the Examiner

REJECTION UNDER 35 U.S.C. § 103

Claims 10, 33 and 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Kamen (International Pub. No. WO 99/19074). This rejection is respectfully traversed.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Bettoli (U.S. Patent No. 4,180,615). This rejection is respectfully traversed.

Claims 36 and 68 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Young (U.S. Patent Pub. No. 2003/0081096). This rejection is respectfully traversed.

Claim 50 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Matthews et al. (U.S. Patent No. 4,313,969). This rejection is respectfully traversed.

Claim 78 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Martin (U.S. Patent No. 4,072,099). This rejection is respectfully traversed.

Claim 81 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sachs (U.S. Pat. No. 4,309,452) in view of Troue (U.S. Patent No. 4,485,123). This rejection is respectfully traversed.

The rejected claims each depend from either claim 1 or claim 38. Thus, Applicant submits that the arguments presented above with respect to claims 1 and 38 apply here equally. Applicant further submits that the other references cited by the

Examiner fail to cure the deficiencies of the references relied upon by the Examiner for rejecting claims 1 and 38.

In view of the foregoing, Applicant submits that the rejected claims define over the art cited by the Examiner.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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